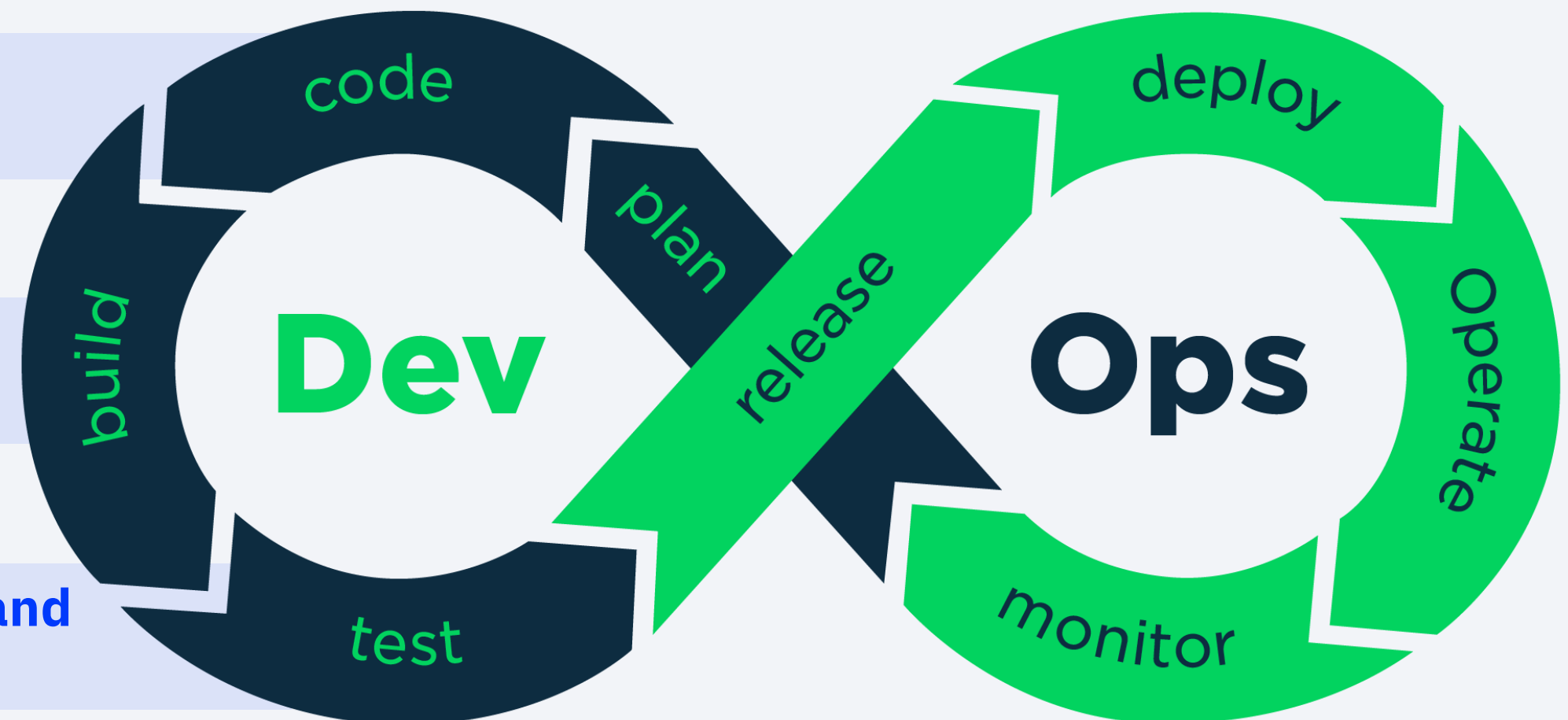# {EPITECH}

KICK-OFF

DevOps

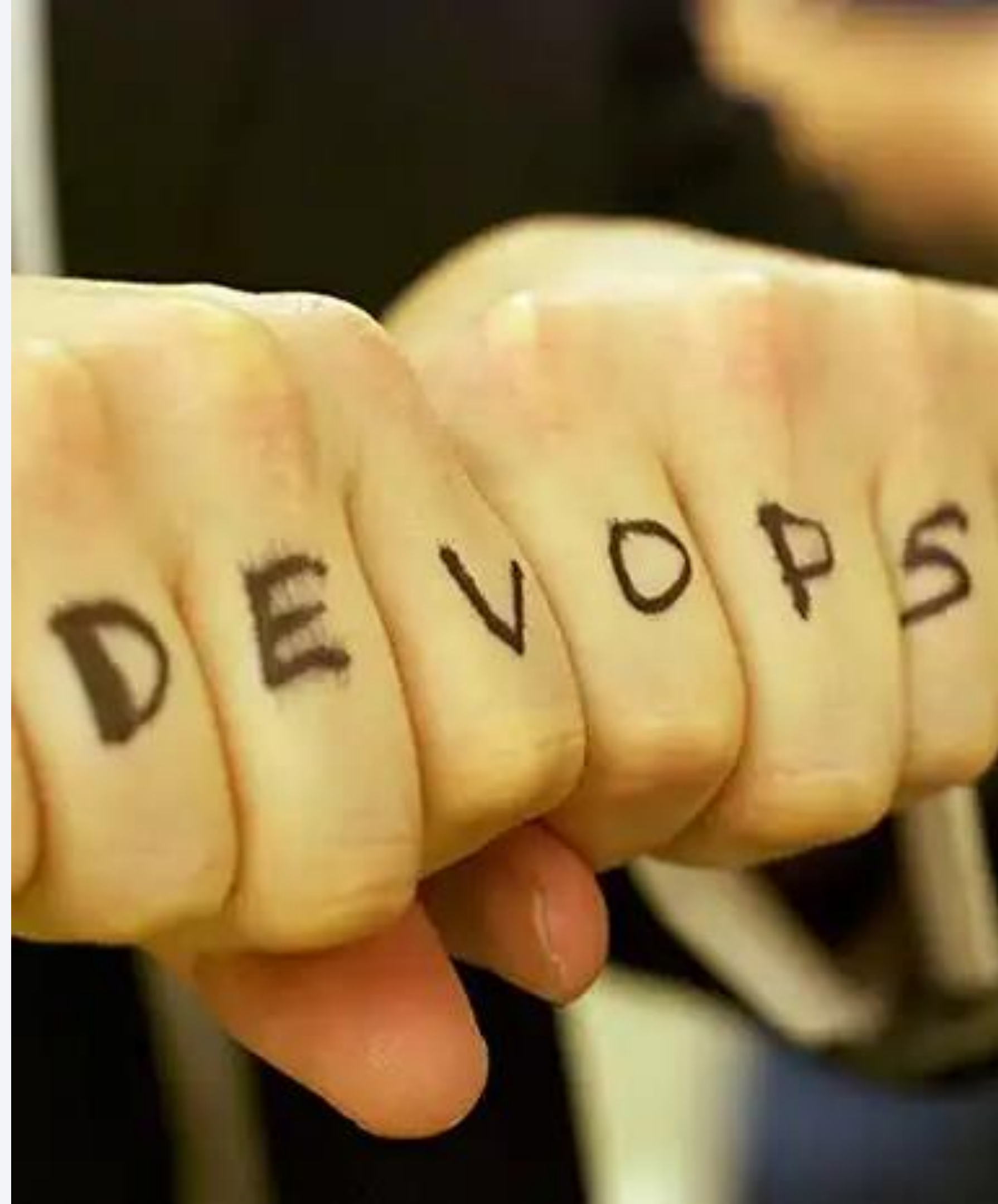# About DevOps_

- **Developers** write code

- **Operators** make sure the infrastructure is working

- **DevOps** is about making everything united and keeping everyone happy

The philosophy_

Set of best-practices and tools between devs and sys admin to improve and shorten the development life cycle.

DevOps main benefits

- Improved quality and automation

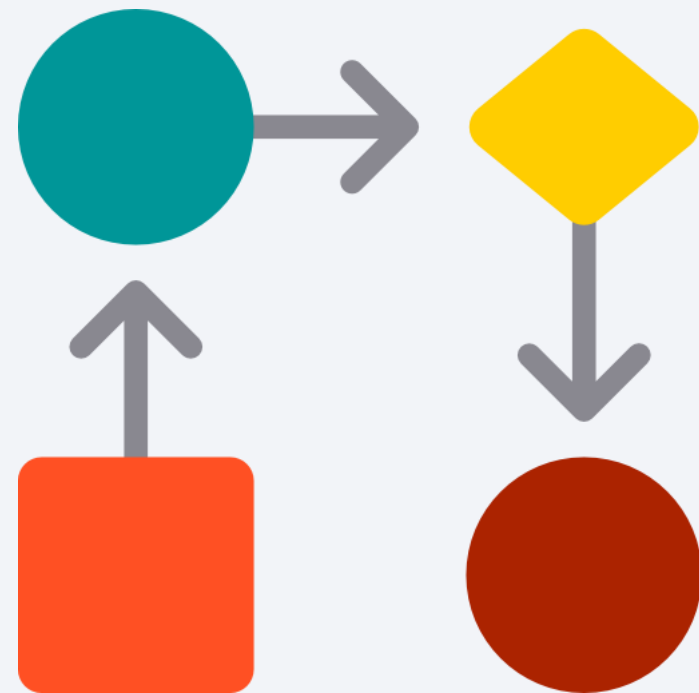- Faster, better, stronger product delivery

- Easier maintainability and issue resolution

- Geater flexibility, scalability and availability

- Reduced complexity, cycle time, human labor and costs

- Maire time + freedom for creative and innovative tasks
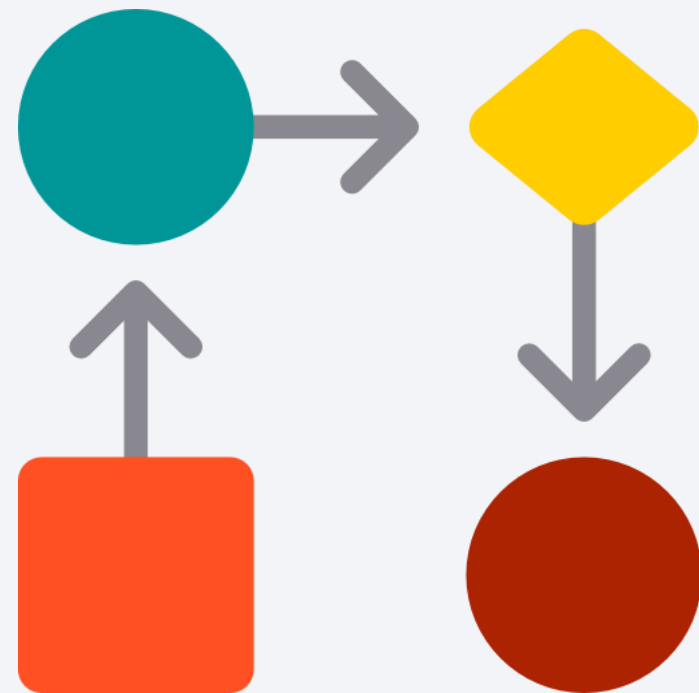
USE-CASE 1: Reproductible test environment_

You embed source code, runtime and dependencies in containers

A system administrator runs the containers in production

Same behavior for everyone

No more excuse such as: "But it works on my machine! :("
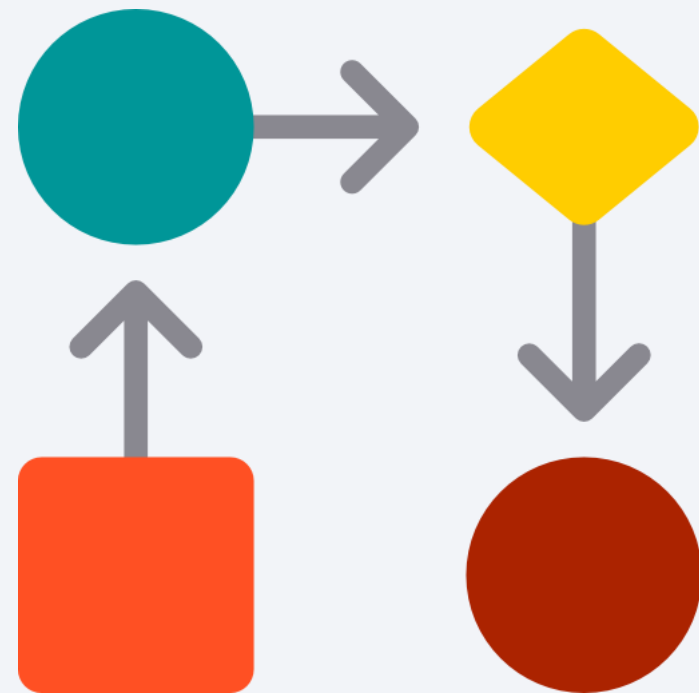
USE-CASE 2: Continuous Integration

You specify how to compile and build your program

A system administrator provide an automation platform

Whenever your push to your repository, it checks everything for you
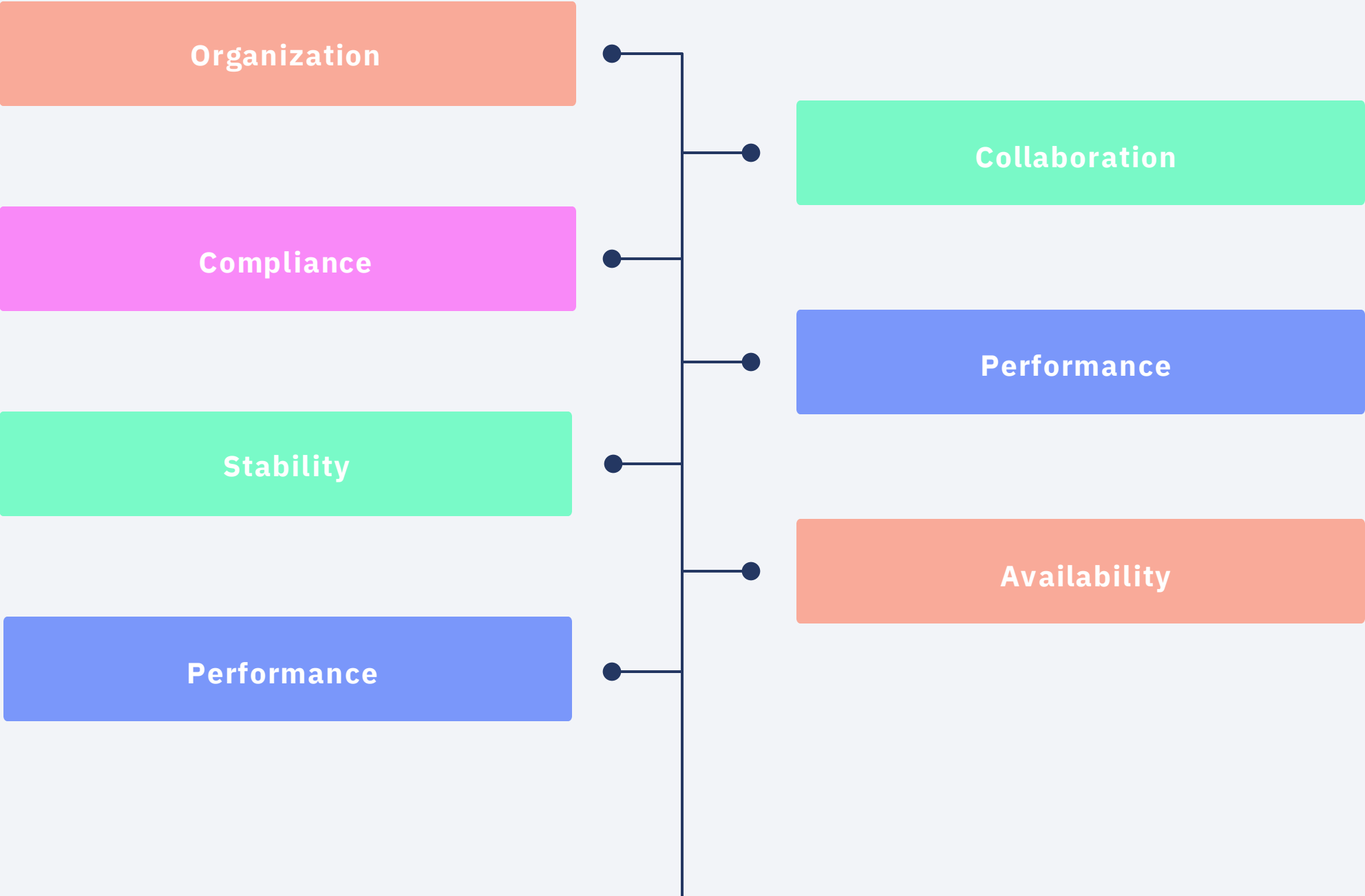
USE-CASE 3: Resilient applications

A system administrator build a multi-node infrastructure

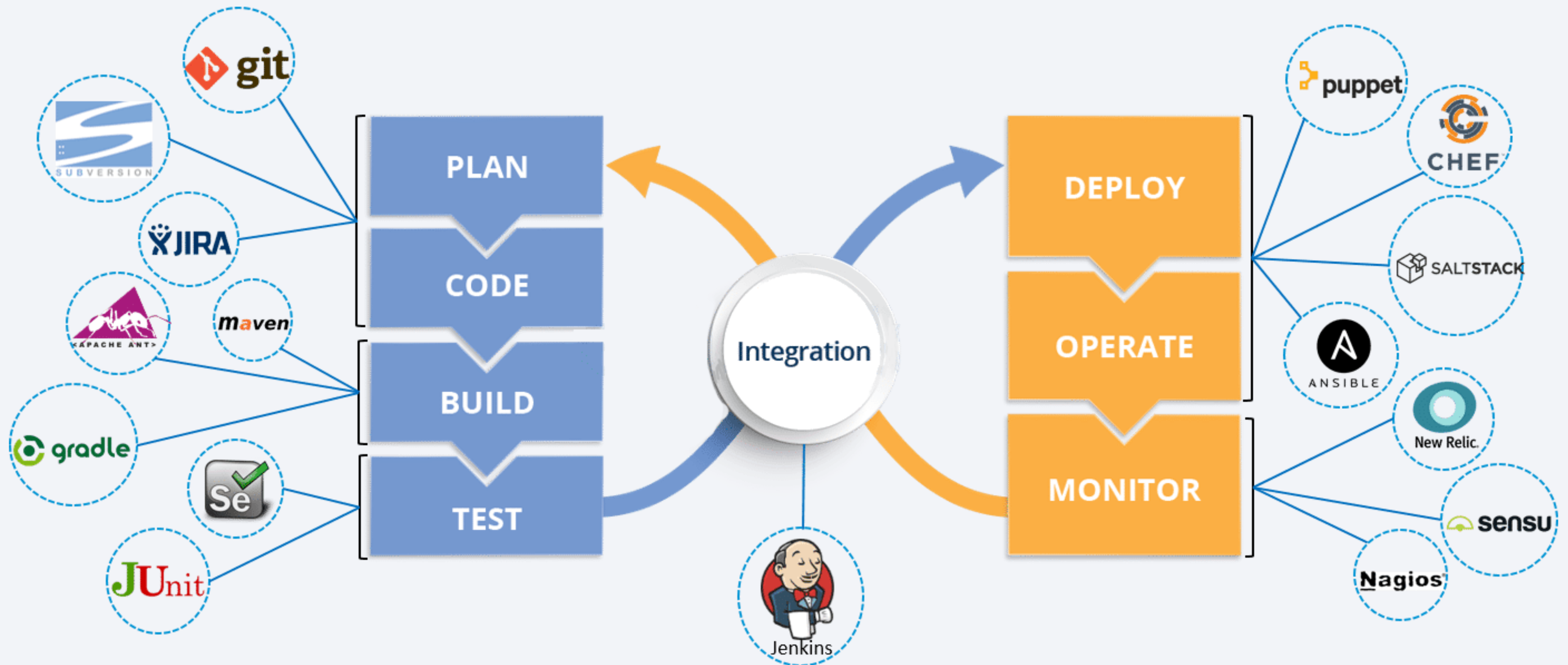It has some specific orchestration features

You deploy and never get worried if something breaks

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DevOps main challenges_

Challenges are the best way to improve

Organization

Collaboration

Compliance

Performance

Stability

Availability

Performance

DevOps common tools

DevOps projects

- 2 awesome projects
  (3 if you choose T-DOP-603 in June)

- It will help you in your other projects

- And it will facilitate your future work

- Make sure you understand every notion

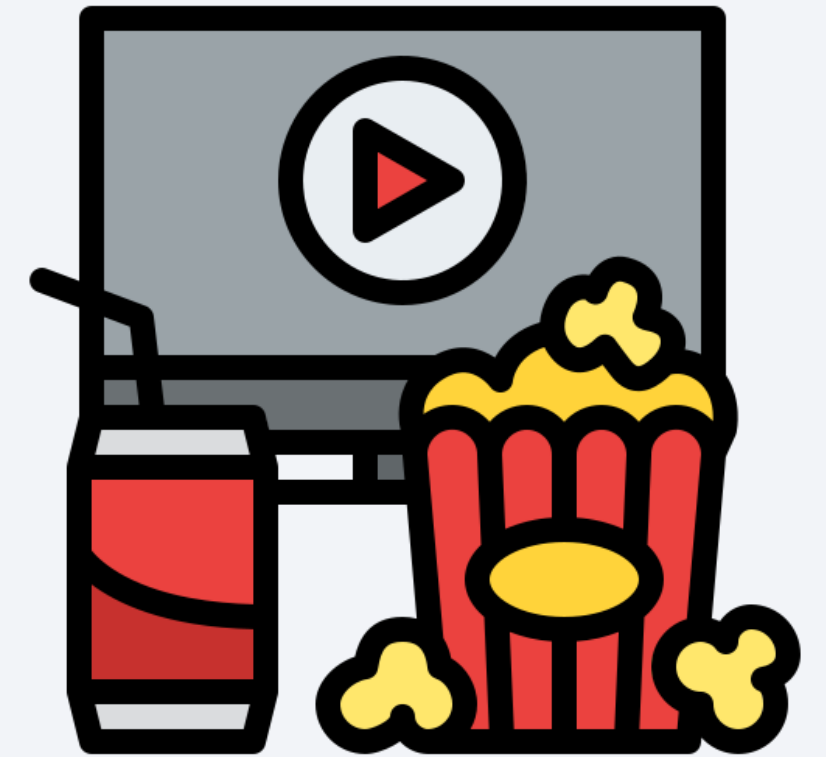# Stuff to dig and watch

The twelve-factor app

DevOps in 5 minutes

The ING Bank improved its time to market from 13 weeks to less than 1

AAA Automated testing…for AAA games, by a Games developer advocate at Google

Game development with Dori Exterman, CTO at IncrediBuild

The Secrets to Agility at Tesla, Elon's Master Plan to Infinity

How software lifecycle integration and DevOps are transforming car development

QUESTIONS?

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